ELSEVIER

Thin Solid Films 279 (1996) 253

thin solid films

Author Index of Volume 279

Ache, H.J., 233
Adanu, K.G., 29
Aktas, G., 199
Antonov, E.N., 66
Aoyama, M., 174
Ashour, A., 242

Bagratashvili, V.N., 66
Baranauskas, V., 119
Battiston, G.A., 115
Belyi, V.I., 135
Bertoncello, R., 115
Bessergenev, V.G., 135
Bielle-Daspet, D., 145
Boakye, F., 29
Borisov, S.V., 75
Boukezzata, M., 145
Bradaczek, H., 228
Brusatin, G., 23
Burian, A., 204

Caccavale, F., 115
Calzada, M.L., 70
Cao, L.L., 98
Carmona, F., 70
Choi, S.K., 110
Choi, W.C., 1
Colgan, E.G., 193
Colligon, J.S., 4
Czolk, R., 233

Dale, R.S., 98
De Wit, L., 216
Dhanabalan, A., 221
D'Heurle, F.M., 248
Dickinson, J.T., 43
Di Nunzio, S., 180
Drits, V.A., 228

Ebid, M.R., 242
Egdell, R.G., 98
Egerton, R.F., 34
El-Kadry, N., 242
Ermakov, M.G., 93
Esme, I., 199

Fahland, M., 169
Farghal, M., 242
Fragalli, J.F., 119
Frank-Kamenetskaya, O.V., 228
Fujimoto, S., 4

Georgiadis, G.C., 98
Gerbasi, R., 115
Goedicke, K., 169
Gromilov, S.A., 135
Gutberlet, T., 228

Haidoux, A., 59
Hata, T., 131
Heffron, R., 43
Henke, S., 106
Hipps, K.W., 43
Hlávka, J., 209
Huang, L., 43
Hwang, B.J., 236

Ibanez, A., 59
Innocenzi, P., 23
Ivanova, E.N., 135
Ivanova, T.I., 228
Ivanovsky, A.L., 75

James, W.J., 155
Jang, S.-S., 17
Jarząbek, B., 204
Jayatissa, A.H., 174
Jeong, I.-S., 17
Ji, F., 213
Jiang, E.Y., 49
Jones, F.H., 98
Jung, D.Y., 110
Jung, M., 189
Jung, S.K., 110

Kaneko, Y., 174
Kang, T.W., 14, 166
Kastowsky, M., 228
Kim, C.K., 1
Kim, C.O., 189
Kim, E.K., 1
Kim, H.-G., 140
Kim, T.W., 14, 166, 189
Kim, Y.-M., 140
Kirichenko, V.N., 135
Kleima, F.J., 87
Koehorst, R.B.M., 87
Kolenda, J., 119
Kovalevskaya, Yu.A., 135
Kuznetsov, M.V., 75
Kweon, S.Y., 110

Larionov, S.V., 135
Lee, D.U., 189
Lee, K.L., 236
Lee, M.J., 98
Lee, M.-S., 1
Lee, P., 82
Lee, W.-J., 17, 140
Lemenovski, D.A., 66
Li, S., 213
Lin, C., 49
Lindner, J.K.N., 106
Liu, Y.G., 49
Liu Ming, S., 49
Luo, J., 53

Ma, H., 213
Ma, J., 213
Major, S., 221
Mansour, F., 145
Martucci, A., 23
Mazur, U., 43
Mendiola, J., 70
Miao, Y.B., 11
Milde, F., 169
Min, S.-K., 1
Misoguti, L., 119
Mitrofanov, B.V., 75
Mizuno, S., 82

Nadolinnyi, V.A., 135
Nam, S.-W., 7
Newkirk, J.W., 155
Newman, R.C., 4
Nguyen, B., 82

Ohlídal, I., 209
Orr, S.-J., 7

Park, T.H., 189
Parker, W.G., 162
Philippot, E., 59
Plaschke, M., 233
Pocztowski, G., 204
Popov, V.K., 66
Popovici, G., 93
Porchia, M., 115
Prelas, M.A., 93
Pringle, O.A., 155
Pyun, S.-I., 7

Radhakrishnan, K., 11
Ramadan, A.A., 242
Rastomjee, C.S., 98
Rastorguev, A.A., 135
Rauschenbach, B., 106
Reichert, J., 233
Román, E., 70

Sambles, J.R., 162
Saris, F.W., 216
Sarrabayrouse, G., 145
Sasaki, K., 131
Schaaf, P., 216
Schaafsma, T.J., 87
Schaffer, R.J., 98
Shalaeva, E.V., 75
Simmonds, M.C., 4
Sirera, R., 70
Siriwardane, H., 155
Sitter, H., 209
Soh, J.-W., 17
Sokolina, G., 93
Stritzker, B., 106
Sun, D.C., 49
Sung, T., 93
Surdutovich, G.I., 119

Takashima, Y., 131
Talwar, S.S., 221
Tao, K., 53
Tate, T.J., 98
Theis-Bröhl, K., 180
Tourtin, F., 59

Urabe, K., 23

Vedeneev, A.S., 93
Verma, A., 82
Vitlina, R., 119
Vižd'a, F., 209

Wan, L., 34
Wang, X.-D., 43
Watson, T.J., 162
Weber, T., 216
Weszka, J., 204
Wienke, J., 87
Woo, Y.D., 14, 166

Yamaguchi, T., 174
Ylilammi, M., 124
Yoon, S.F., 11

Zabel, H., 180
Zahirul Alam, A.H.M., 131
Zemskova, S.M., 135
Zhang, S.-L., 248

Elsevier Science S.A.

ELSEVIER

Thin Solid Films 279 (1996) 255–258

thin solid films

Subject Index of Volume 279

Adhesion
adhesion behavior of PVD coatings on ECR plasma and ion beam treated polymer films, 169
Adsorption
adsorption of oriented methyl pyridinium porphyrins on solid substrates, 87
Alloys
synthesis of a novel phase in a Fe–Cr alloy grown by ion assisted co-sputter deposition, 4
Aluminium nitride
C-axis orientation of AlN films prepared by ECR PECVD, 17
chemical etching of ion beam deposited AlN and AlN:H, 43
Aluminium oxide
characterization of pit morphology of sputtered Al-1wt.%Si-0.5wt.%Cu alloy thin film, 7
Amorphous materials
the optical dielectric function of amorphous carbon films, 162
thickness change in an annealed amorphous silicon film detected by spectroscopic ellipsometry, 174
frequency-dependent conductivity in $As_{0.40}$ $Se_{0.40}Te_{0.20}$ thin films, 199
optical properties of amorphous thin films of the Zn–P system, 204
Anisotropy
an interference method for the determination of thin film anisotropy, 119
Annealing
thickness change in an annealed amorphous silicon film detected by spectroscopic ellipsometry, 174
activation energy for Ni_2Si and NiSi formation measured over a wide range of ramp rates, 193
Arsenic
molecular beam epitaxial growth of high quality InAlAs on InP (100) substrates at very high arsenic pressures, 11
Auger electron spectroscopy (AES)
characterization of pit morphology of sputtered Al-1wt.%Si-0.5wt.%Cu alloy thin film, 7

Barium
irregular mixed-layer structure of Ba-behenate multibilayer film, 228
Boron
characteristics of the thermal oxidation of heavily boron-doped polycrystalline silicon thin films, 145

C_{60}
electron diffraction studies of epitaxial C_{60} thin films on mica(001), 106
Cadmium telluride
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242
Carbon
preparation and characterization of carbon nitride thin films, 34
the optical dielectric function of amorphous carbon films, 162
Chalcogens
frequency-dependent conductivity in $As_{0.40}$ $Se_{0.40}Te_{0.20}$ thin films, 199

Chemical vapour deposition (CVD)
C-axis orientation of AlN films prepared by ECR PECVD, 17
local range order in thin dielectric films of gallium phosphate, 59
improved gap-filling capability of fluorine-doped PECVD silicon oxide thin films, 82
chemical vapour deposition and characterization of gallium oxide thin films, 115
deposition of PZT films by MOCVD at low temperature and their change in properties with annealing temperature and Zr/Ti ratio, 140
characteristics of the thermal oxidation of heavily boron-doped polycrystalline silicon thin films, 145
Coatings
microstructural characterization of gold-doped silica–titania sol–gel films, 23
Cobalt
epitaxial growth of Co/Cu(001) superlattices on sapphire substrates, 180
Conductivity
electrical characteristics of diamond films diffused using Li salts, 93
frequency-dependent conductivity in $As_{0.40}$ $Se_{0.40}Te_{0.20}$ thin films, 199
electrical and optical properties of ZnO:Al films prepared by an evaporation method, 213
Copper
epitaxial growth of Co/Cu(001) superlattices on sapphire substrates, 180

Deposition process
synthesis of a novel phase in a Fe–Cr alloy grown by ion assisted co-sputter deposition, 4
the Néel temperature of α-Mn thin films, 29
supercritical fluid chemical deposition of thin InP films. A new approach and precursors, 66
Depth profiling
quantitative X-ray diffraction analysis of surface layers by computed depth profiling, 53
Diamond
electrical characteristics of diamond films diffused using Li salts, 93
Diamond film
surface characterization of diamond films polished by thermomechanical polishing method, 110
Dielectric properties
the optical dielectric function of amorphous carbon films, 162
Dielectrics
local range order in thin dielectric films of gallium phosphate, 59
influence of thermal treatment on the properties of Ca-modified lead titanate thin films, 70

Electrical properties and measurements
influence of thermal treatment on the properties of Ca-modified lead titanate thin films, 70
electrical characteristics of diamond films diffused using Li salts, 93

Elsevier Science S.A.

frequency-dependent conductivity in $As_{0.40}Se_{0.40}Te_{0.20}$ thin films, 199
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242
Electrochemistry
electropolymerization of pyrrole on $PbO_2/SnO_2/Ti$ substrate, 236
Electroluminescence
electroluminescent ZnS:Mn films prepared at 220–450 °C using complex compounds with sulphur-containing ligands, 135
Electron diffraction
electron diffraction studies of epitaxial C_{60} thin films on mica(001), 106
Electron energy loss spectroscopy
preparation and characterization of carbon nitride thin films, 34
Ellipsometry
thickness change in an annealed amorphous silicon film detected by spectroscopic ellipsometry, 174
Epitaxy
epitaxial growth of Co/Cu(001) superlattices on sapphire substrates, 180
Etching
chemical etching of ion beam deposited AlN and AlN:H, 43
Evaporation
activation energy for Ni_2Si and NiSi formation measured over a wide range of ramp rates, 193

Fluorescence
stability improvement of optochemical sol–gel film sensors by immobilisation of dye-labeled dextrans, 233
Fluorides
monolayer thickness in atomic layer deposition, 124
Fourier transform infrared spectroscopy
chemical etching of ion beam deposited AlN and AlN:H, 43
improved gap-filling capability of fluorine-doped PECVD silicon oxide thin films, 82

Gallium arsenide
improvement of the crystallinity of GaAs epitaxial layers grown on Si substrates assisted by electron beam irradiation, 14
charge transfer and electronic subband studies in a strained $In_{0.15}Ga_{0.85}As/Al_{0.22}Ga_{0.78}As$ single quantum well, 189
Gallium oxide
chemical vapour deposition and characterization of gallium oxide thin films, 115
Gallium phosphate
local range order in thin dielectric films of gallium phosphate, 59
Germanium
improvement of the crystallinity of a GaAs epitaxial film grown on a Si substrate using a Si/SiGe/Ge buffer layer, 166
Glow discharge
microstructure of thin iron carbide films prepared in a glow discharge, 155
Gold
microstructural characterization of gold-doped silica–titania sol–gel films, 23
Graphitization
surface characterization of diamond films polished by thermomechanical polishing method, 110
Growth mechanism
electropolymerization of pyrrole on $PbO_2/SnO_2/Ti$ substrate, 236
precisions on reaction monitoring from in-situ resistance measurements: relations between such measurements and actual reaction kinetics, 248

Heat treatment
influence of thermal treatment on the properties of Ca-modified lead titanate thin films, 70
Heterostructures
molecular beam epitaxial growth of high quality InAlAs on InP (100) substrates at very high arsenic pressures, 11
Hot filament CVD
surface characterization of diamond films polished by thermomechanical polishing method, 110

Indium
characterization of the oxidized indium thin films with thermal oxidation, 1
properties of indium tin oxide films with indium tin modulation layers prepared by nano-scale controlled reactive magnetron sputtering, 131
Indium oxide
properties of indium tin oxide films with indium tin modulation layers prepared by nano-scale controlled reactive magnetron sputtering, 131
Indium phosphide
supercritical fluid chemical deposition of thin InP films. A new approach and precursors, 66
Ion bombardment
improved gap-filling capability of fluorine-doped PECVD silicon oxide thin films, 82
Ion implantation
synthesis of a novel phase in a Fe–Cr alloy grown by ion assisted co-sputter deposition, 4
an investigation of doping of SnO_2 by ion implantation and application of ion-implanted films as gas sensors, 98
characteristics of the thermal oxidation of heavily boron-doped polycrystalline silicon thin films, 145
Iron
magnetron facing target sputtering system for fabricating single-crystal films, 49
search for giant magnetic moments in ion-beam-synthesized α''-$Fe_{16}N_2$, 216
Iron carbide
microstructure of thin iron carbide films prepared in a glow discharge, 155

Langmuir–Blodgett films
structure and polymerisation behaviour of cadmium 10,12-pentacosadiynoate Langmuir–Blodgett films, 221
irregular mixed-layer structure of Ba-behenate multibilayer film, 228
Lead
influence of thermal treatment on the properties of Ca-modified lead titanate thin films, 70
deposition of PZT films by MOCVD at low temperature and their change in properties with annealing temperature and Zr/Ti ratio, 140
Lead oxide
electropolymerization of pyrrole on $PbO_2/SnO_2/Ti$ substrate, 236
Lithium
electrical characteristics of diamond films diffused using Li salts, 93
Luminescence
improvement of the crystallinity of a GaAs epitaxial film grown on a Si substrate using a Si/SiGe/Ge buffer layer, 166

Magnetic properties and measurements
magnetron facing target sputtering system for fabricating single-crystal films, 49
search for giant magnetic moments in ion-beam-synthesized α''-$Fe_{16}N_2$, 216
Manganese
the Néel temperature of α-Mn thin films, 29
Mercury
stability improvement of optochemical sol–gel film sensors by immobilisation of dye-labeled dextrans, 233

Metal-oxide semiconductor structure (MOS)
metastable $TiSi_xN_yO_z$ films of B1-type structure prepared by the arc process, 75
Metals
magnetron facing target sputtering system for fabricating single-crystal films, 49
Metastable
synthesis of a novel phase in a Fe–Cr alloy grown by ion assisted co-sputter deposition, 4
Methyl pyridinium porphyrins
adsorption of oriented methyl pyridinium porphyrins on solid substrates, 87
Mica
electron diffraction studies of epitaxial C_{60} thin films on mica(001), 106
Microstructure
microstructure of thin iron carbide films prepared in a glow discharge, 155
Molecular beam epitaxy
improvement of the crystallinity of GaAs epitaxial layers grown on Si substrates assisted by electron beam irradiation, 14
improvement of the crystallinity of a GaAs epitaxial film grown on a Si substrate using a Si/SiGe/Ge buffer layer, 166
Molecular beam epitaxy (MBE)
molecular beam epitaxial growth of high quality InAlAs on InP (100) substrates at very high arsenic pressures, 11
charge transfer and electronic subband studies in a strained $In_{0.15}Ga_{0.85}As/Al_{0.22}Ga_{0.78}As$ single quantum well, 189
Monolayers
monolayer thickness in atomic layer deposition, 124
Mössbauer spectroscopy
search for giant magnetic moments in ion-beam-synthesized α''-$Fe_{16}N_2$, 216
Multilayers
an interference method for the determination of thin film anisotropy, 119

Nanostructures
microstructural characterization of gold-doped silica–titania sol–gel films, 23
Nickel
activation energy for Ni_2Si and NiSi formation measured over a wide range of ramp rates, 193
Nitrides
preparation and characterization of carbon nitride thin films, 34
chemical etching of ion beam deposited AlN and AlN:H, 43
search for giant magnetic moments in ion-beam-synthesized α''-$Fe_{16}N_2$, 216

Optical properties
improvement of the crystallinity of GaAs epitaxial layers grown on Si substrates assisted by electron beam irradiation, 14
the optical dielectric function of amorphous carbon films, 162
optical properties of amorphous thin films of the Zn–P system, 204
new technique of measurement of optical parameters of thin films, 209
Organometallic substances
supercritical fluid chemical deposition of thin InP films. A new approach and precursors, 66
Oxidation
characterization of the oxidized indium thin films with thermal oxidation, 1
characteristics of the thermal oxidation of heavily boron-doped polycrystalline silicon thin films, 145
Oxides
monolayer thickness in atomic layer deposition, 124

Phosphorus
optical properties of amorphous thin films of the Zn–P system, 204
Photovoltage
new technique of measurement of optical parameters of thin films, 209
Physical vapour deposition
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242
Plasma processing and deposition
C-axis orientation of AlN films prepared by ECR PECVD, 17
adhesion behavior of PVD coatings on ECR plasma and ion beam treated polymer films, 169
Polymers
adhesion behavior of PVD coatings on ECR plasma and ion beam treated polymer films, 169
structure and polymerisation behaviour of cadmium 10,12-pentacosadiynoate Langmuir–Blodgett films, 221
electropolymerization of pyrrole on PbO_2/SnO_2/Ti substrate, 236

Reaction kinetics
precisions on reaction monitoring from in-situ resistance measurements: relations between such measurements and actual reaction kinetics, 248
Resistivity
the Néel temperature of α-Mn thin films, 29
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242
precisions on reaction monitoring from in-situ resistance measurements: relations between such measurements and actual reaction kinetics, 248

Scanning electron microscopy
improved gap-filling capability of fluorine-doped PECVD silicon oxide thin films, 82
Scanning electron microscopy (SEM)
characterization of pit morphology of sputtered Al-1wt.%Si-0.5wt.%Cu alloy thin film, 7
Semiconductors
new technique of measurement of optical parameters of thin films, 209
Sensors
an investigation of doping of SnO_2 by ion implantation and application of ion-implanted films as gas sensors, 98
stability improvement of optochemical sol–gel film sensors by immobilisation of dye-labeled dextrans, 233
Silicides
activation energy for Ni_2Si and NiSi formation measured over a wide range of ramp rates, 193
precisions on reaction monitoring from in-situ resistance measurements: relations between such measurements and actual reaction kinetics, 248
Silicon
improvement of the crystallinity of GaAs epitaxial layers grown on Si substrates assisted by electron beam irradiation, 14
metastable $TiSi_xN_yO_z$ films of B1-type structure prepared by the arc process, 75
characteristics of the thermal oxidation of heavily boron-doped polycrystalline silicon thin films, 145
improvement of the crystallinity of a GaAs epitaxial film grown on a Si substrate using a Si/SiGe/Ge buffer layer, 166
thickness change in an annealed amorphous silicon film detected by spectroscopic ellipsometry, 174
Sol–gel
stability improvement of optochemical sol–gel film sensors by immobilisation of dye-labeled dextrans, 233
Sputtering
synthesis of a novel phase in a Fe–Cr alloy grown by ion assisted co-sputter deposition, 4

characterization of pit morphology of sputtered Al-1wt.%Si-0.5wt.%Cu alloy thin film, 7
magnetron facing target sputtering system for fabricating single-crystal films, 49
properties of indium tin oxide films with indium tin modulation layers prepared by nano-scale controlled reactive magnetron sputtering, 131
Structural properties
microstructural characterization of gold-doped silica–titania sol–gel films, 23
quantitative X-ray diffraction analysis of surface layers by computed depth profiling, 53
structure and polymerisation behaviour of cadmium 10,12-pentacosadiynoate Langmuir–Blodgett films, 221
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242
Sulphides
monolayer thickness in atomic layer deposition, 124
Superlattices
epitaxial growth of Co/Cu(001) superlattices on sapphire substrates, 180
Surface and interface states
charge transfer and electronic subband studies in a strained $In_{0.15}Ga_{0.85}As/Al_{0.22}Ga_{0.78}As$ single quantum well, 189

Thermal oxidation
characterization of the oxidized indium thin films with thermal oxidation, 1
Thermomechanical polishing
surface characterization of diamond films polished by thermomechanical polishing method, 110
Tin
properties of indium tin oxide films with indium tin modulation layers prepared by nano-scale controlled reactive magnetron sputtering, 131
Tin oxide
an investigation of doping of SnO_2 by ion implantation and application of ion-implanted films as gas sensors, 98
Titanium
deposition of PZT films by MOCVD at low temperature and their change in properties with annealing temperature and Zr/Ti ratio, 140
Titanium nitride
metastable $TiSi_xN_yO_z$ films of B1-type structure prepared by the arc process, 75
Titanium oxide
metastable $TiSi_xN_yO_z$ films of B1-type structure prepared by the arc process, 75
Transmission electron microscopy
preparation and characterization of carbon nitride thin films, 34

X-ray absorption spectroscopy
local range order in thin dielectric films of gallium phosphate, 59
X-ray diffraction
molecular beam epitaxial growth of high quality InAlAs on InP (100) substrates at very high arsenic pressures, 11
C-axis orientation of AlN films prepared by ECR PECVD, 17
quantitative X-ray diffraction analysis of surface layers by computed depth profiling, 53
electrical and optical properties of ZnO:Al films prepared by an evaporation method, 213
irregular mixed-layer structure of Ba-behenate multibilayer film, 228
the electrical properties of CdTe films of different preparation conditions in correlation with microstructure changes, 242

Zinc
optical properties of amorphous thin films of the Zn–P system, 204
Zinc oxide
electrical and optical properties of ZnO:Al films prepared by an evaporation method, 213
Zirconium
deposition of PZT films by MOCVD at low temperature and their change in properties with annealing temperature and Zr/Ti ratio, 140
ZnS:Mn films
electroluminescent ZnS:Mn films prepared at 220–450 °C using complex compounds with sulphur-containing ligands, 135